

ABSTRACT OF THE DISCLOSURE

The present invention relates to a method for thermally printing a pre-selected dye image onto a three dimensional object using an improved dye carrier sheet comprising a film substrate coated with a dye-receptive layer. The dye carrier sheet has high shrink-force, tensile strength, melt strength, and infrared (IR) absorption properties, and can conform tightly to the object. The film substrate is made from an ionomer copolymer of: i) α -olefins of the formula $R-CH=CH_2$, wherein R is a hydrogen atom or an alkyl radical having 1 to 8 carbon atoms, ii) α,β -ethylenically unsaturated carboxylic acids having 3 to 8 carbon atoms, and iii) optionally an additional monoethylenically unsaturated comonomer compound, wherein 10% to 90% of the carboxylic acid functional groups are ionized by neutralization via metallic ions distributed over the copolymer.